

Nicholas Mastrota/DC/USEPA/US 01/24/2008 03:44 PM To Norman Spurling/DC/USEPA/US@EPA

CC

bcc

Subject Fw: Chino State Prison bird kill incident

Norman,

Please process this email and the attachment as an incident report. It is an update to 1018804-001 and 1018984-001. Thanks.

Nick

---- Forwarded by Nicholas Mastrota/DC/USEPA/US on 01/24/2008 03:41 PM ----



"Stella Borucki" <sborucki@OSPR.DFG.CA.G OV>

To Nicholas Mastrota/DC/USEPA/US@EPA

CC

01/24/2008 02:22 PM

Subject Re: Chino State Prison bird kill incident

Hi Nick,

It was positive for zinc phosphide. Here's the report.

Thanks. Stella

Stella Borucki
Environmental Scientist
Pesticide Investigations Unit
Department of Fish and Game
1701 Nimbus Road, Suite F
Rancho Cordova, CA 95670
(916) 358-2954

>>> <Mastrota.Nicholas@epamail.epa.gov> 1/24/2008 9:53 AM >>>

Hello Stella,

Do you have any analytical results yet on the deaths of 11 Canada geese last June at the Chino State Prison in San Bernardino County? Was zinc phosphide confirmed as the cause? Thanks.

F. Nicholas Mastrota
EIIS Database Manager
Environmental Fate and Effects Division (7507P)
Office of Pesticide Programs
US Environmental Protection Agency
703-305-5247



STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME

PESTICIDE LABORATORY REPORT

1701 Nimbus Road, Suite F Rancho Cordova, California 95670

Lab No:

P-2469

Date Received: June 26, 2007

E.P. No.

L-341-07-01, L-341-07-02

Sample: geese

Index: N400

PCA: H2312

To:

Warden Kyle Chang

Department of Fish and Game

Region 6

3602 Inland Empire Blvd, B-130

Ontario, CA 91764

Report Date: September 18, 2007

updates I018742-001 and I018984-023

Remarks

DFG Region 6 enforcement staff reported II dead Canada geese at Chino Prison in San Bernardino County, California. Rodenticide analysis was performed. TO 18804-001

Background

On June 19, 2007, DFG Region 6 staff received a report of 11 dead Canada geese, Branta canandensis, at Chino Prison in San Bernardino County, California. The San Bernardino County Agricultural Commissioner's Office was also contacted. The prior day, ZP Rodent Oat Bait (active ingredient: zinc phosphide) had been applied above ground in the area to treat for ground squirrels. Region 6 enforcement staff collected the geese and shipped two to the DFG Pesticide Investigations Unit in Rancho Cordova.

RESULTS OF EXAMINATION

Two geese were examined at the PIU. Both geese appeared healthy with adequate amounts of fat. No physical trauma was observed in either goose. One goose had pooled blood in the elbow joint of the right wing. Geese were submitted to the California Animal Health and Food Safety Laboratory (CAHFSL) at UC Davis to test the stomach contents for phosphine. Liver contents were also analyzed for heavy metals.

Conclusion

The heavy metal screen was negative for any elevated trace metals in the livers of the geese.

The proventriculus contents of the geese contained phosphine gas. This finding is consistent with exposure to a zinc-phosphide contained bait. The presence of phosphine gas in a biological sample is considered to be of toxicological significance at any concentration as it has acute effects at relatively low concentrations and dissipates rapidly.

The presence of zinc phosphide bait at the location where the geese were found dead, as well as the presence of phosphine in the stomachs of the geese make it very likely that their deaths resulted from zinc phosphide exposure.

Chemical analysis for the presence of phosphine was performed by Dr. Birgit Puschner of the CAHFSL. Chemical analyses for trace metals were performed by Patricia Bucknell from CDFG Water Pollution Control Laboratory and chemists at CAHFSL.

PESTICIDE	INVESTIGATIONS UNIT	
OFFICE OF	SPILL PREVENTION AND RESPONS	ŀ

By	_
Stella Borucki	
Principal Investigator	
Approved	
Brian Finlayson, Chief	
Pesticide Investigations Unit	

Cc: George Dearmin

San Bernardino County Agricultural Commissioner's Office

Chemical analysis (DFG): \$112 Chemical analysis (UCD): 69 Assessment and report: 350 Total Cost of investigation: \$531